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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,720

09/06/2006

Dieter Krohn

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EXAMINER

TANG, JEFF

ART UNIT

PAPER NUMBER

3634

MAIL DATE

DELIVERY MODE

12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,720	Applicant(s) KROHN ET AL.	
	Examiner Jeff Tang	Art Unit 3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/25/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Clarifications

2. Regarding 35 USC 112 paragraph 6. Examiner notes from Chapter 2100 of the current MPEP, section 2181:

A claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph if it meets the following 3-prong analysis:

- (A) the claim limitations must use the phrase "means for " or "step for ";*
- (B) the "means for " or "step for " must be modified by functional language; and*
- (C) the phrase "means for " or "step for " must not be modified by sufficient structure, material or acts for achieving the specified function.*

With respect to the first prong of this analysis, a claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph. If an applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant must either: (A) amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines; or (B) show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. 112 , sixth paragraph.

Since examiner cannot find clearly defined equivalents or definitions of -- stiffenening, or engaging or receiving or stop-- means" in the specification, examiner is considering the claims to include any structure capable of performing the function.

Appropriate clarification is required.

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to:

Art Unit: 3634

- (a) Amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines: the phrase "means for" or "step for" must be modified by functional language and the phrase must **not** be modified by sufficient structure, material, or acts for performing the claimed function; or
- (b) Show that the claim limitation is written as a function to be performed and the claim does **not** recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP 2181.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3, 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al. (US 938,375 B2) in view of Sprague (US 6,434,905 B1).** Duncan et al. disclose a sliding door with a frame (110) which can be moved within a guide (Fig. 6a) between a open and closed position, where the frame covers at least certain parts of the edge area of the first or second side of the door leaf when the leaf is in the closed position (Fig. 4), but does not disclose stiffening means. However, Sprague discloses stiffening means (100) characterized in that the door has engaging means (122) and the frame has receiving means (120) which engage with each other essentially only in the closed position and generates a force acting transversely to the sliding direction. Therefore, it would have been obvious to one of ordinary skill in the art to have included the stiffening means as disclosed by Sprague. The motivation for doing so would be to create a force on the frame to avoid flexing.

Art Unit: 3634

Regarding claims 2, 7, 8, 12, and 18, Sprague discloses the engaging means has at least one bevel (122) and the receiving means at least one associated bevel (120) where as a result of the engagement, a force acting on the door leaf transversely to the sliding direction generates the transverse reaction force required to stiffen the frame; **[claim 7]** the receiving means of the frame are arranged adjacent to each other on two opposing inside surfaces of the frame (12); **[claim 8]** characterized in that the engaging means of the door leaf cooperating with the two receiving means of the frame is designed as a claw (Fig. 2); **[claim 12]** characterized in that the receiving means of the frame and the engaging means of the door leaf are designed symmetrically with respect to the plane in which the door leaf slides (Fig. 2); **[claim 18]** characterized in that the receiving means of the frame are arranged adjacent to each other on two opposing inside surfaces of the frame (Fig. 2).

Regarding claims 3, 13, and 16, Duncan et al. disclose locking device (146, 148) that generates the force acting on the door leaf; **[claim 13]** the frame has a first and second longitudinal frame part where the door leaf is being moved from the open position to the closed position and vice versa, the door leaf is pushed through the first longitudinal frame part so that the forward edge of the door leaf comes to rest against the second frame part when the door leaf is in a closed position (Fig. 3 and Fig. 4). **[claim 16]** characterized in that the locking device generates the force acting on the door leaf (146, 148).

Regarding claim 15, It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the door made of sheet metal since

Art Unit: 3634

the examiner takes Official Notice of the equivalence of metallic members in Duncan et al. and sheet metal for their use in the mechanical art and the selection of any of these known equivalents to use sheet metal would be within the level of ordinary skill in the art.

Regarding claims 6, 14, and 17, the engaging means are not located on the rear edge of the door leaf. Although Sprague does not disclose this, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have put the engaging means on the rear edge since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 9, the combination of Sprague and Duncan et al. disclose the first support formed by the bevels, the claws having a second support formed by at least one roller (146, 148, Duncan et al.) which rests against an inside surface of the frame.

Regarding claims 10 and 19, Sprague does not disclose a strap connecting the door leaf and the claw, but does disclose a screw (106). It would have been an obvious matter of design choice to have used a screw, since applicant has not disclosed that using a strap solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Sprague's invention.

Regarding claim 11, the combination of Sprague and Duncan et al. disclose the roller is supported in the end of the claw facing away from the door leaf.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al. (US 938,375 B2) and Sprague (US 6,434,905 B1) as applied to

Art Unit: 3634

claim 3 above, and further in view of Ahlgren (US 3,132,884). Duncan et al.

discloses the invention as set forth, but does not disclose the details regarding the locking device. However, Ahlgren discloses a roller that braced against one side of the frame (23) and presses the door leaf (22) against stop means (21) on against side of the frame. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have included this type of locking mechanism. The motivation for doing so would be to create a stiffening force for the door leaf to prevent flex.

Regarding claim 5, the combination of Duncan et al., Sprague and Ahlgren disclose two sides of the frame being pushed apart by a force generated by the locking device, when the door leaf is locked, the engaging means of the door leaf and the receiving means of the frame hold the frame together, which a transverse relative force acts on the frame and leaf.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Tang whose telephone number is (571) 270-5223. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on (571) 272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHERINE W MITCHELL/
Supervisory Patent Examiner, Art
Unit 3634

/J. T./
Examiner, Art Unit 3634